

THE OKALOACOOCHEE SLOUGH.¹

BY FREDERIC H. KENNARD.

Plates XIII-XV.

WE camped on the nights of March 13 and 14, 1914, about three miles north of the "main strand" of the Big Cypress, close beside the trail, in an open glade among the cypress heads; and both nights the wind blew so that I was glad to crawl into the lee of a neighboring tree.

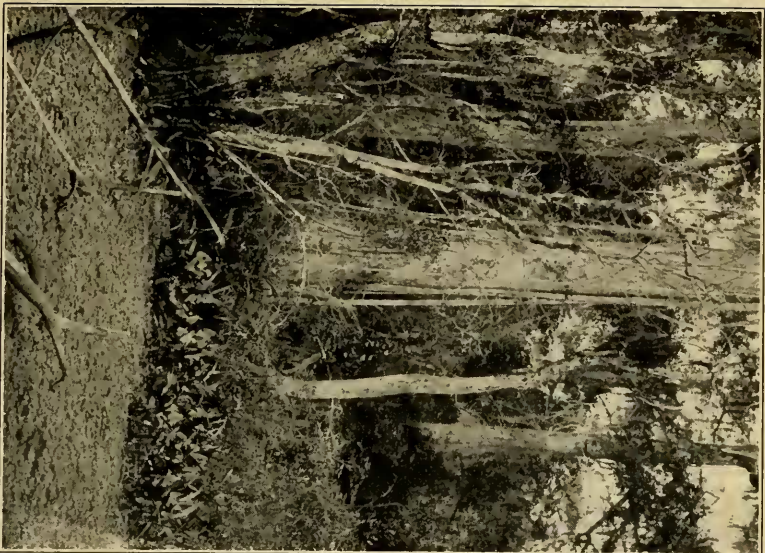
Here we hunted turkeys, obtaining some of both sexes, and collecting several Swallow-tailed Kites, whose nesting season was just beginning, and which I think are, with the exception of the Roseate Spoonbill, the most beautiful birds I have ever shot.

On the 15th we traveled north, along the Immokalee trail for about eight miles, and then struck out across the prairie, skirting the edge of the cypress swamp and pine woods in a northeasterly direction for about seven miles, until we came to a little pine island near the edge of the Okaloacoochee Slough, where we camped for several days.

During the trip I discovered a Swallow-tailed Kite building its nest in the top of a tall, slim pine, near the edge of some pine woods, and close by a cypress swamp. The nest was about sixty-five feet up, and instead of being built against the trunk of the tree, as is so often the case with raptors, was built at the end of an upreaching limb, and from the ground, looked like a rather flimsy structure of sticks, to which the old bird was now adding moss. In shooting this bird I broke his right wing at the pinion joint, and he continued to fly screaming above my head, with the pinion flapping, until I brought him down with another shot. Their powers of flight are certainly marvellous.

En route we saw numbers of cattle, poor scrawny beasts, scattered about the prairie, most of them pretty wild, and every once in

¹ Cf. Auk, Jan., 1915, p. 1, for details of this expedition through southern Florida.



1. SWAMP BENEATH THE WOOD IBIS ROOKERY.



2. NESTS OF THE WOOD IBIS.

a while a group of buzzards marked the spot where one had died. We heard but few Sandhill Cranes, until we neared the Okaloacoochee, when we began to see them, often two or three at a time, and flushed one flock of five and then another of seven that flew off "hollering" at our approach. Here also we saw our first Florida Burrowing Owls, and discovered one of their burrows only a short distance from where we were to camp.

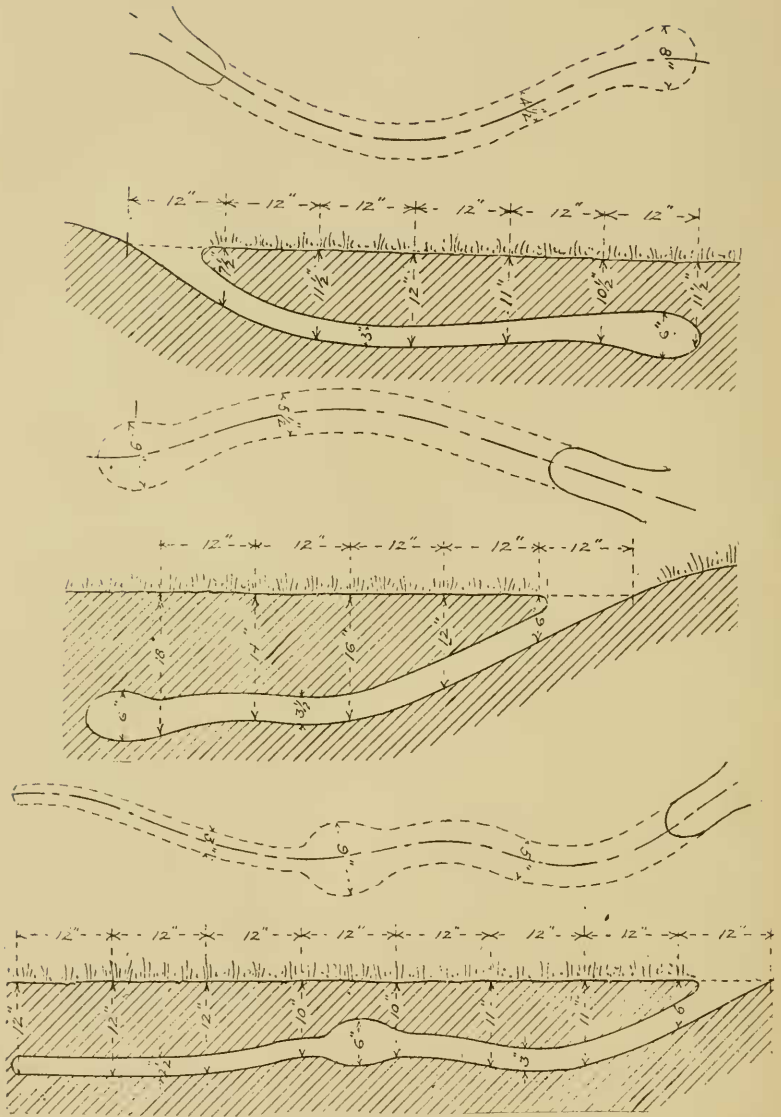
The Okaloacoochee Slough, where we proposed spending the next couple of weeks, is a waterway extending from a few miles south of Fort Thompson, on the Caloosahatchee River, in a southerly direction into the Big Cypress, and from thence to the Gulf. It is bordered by a series of prairies, sloughs, marshes and swamps; most of which are wet throughout the entire year; and seems to be a "fly-way" for all the water birds in that part of the State that do not go up the Gulf coast.

Our first camp was near the southerly end of a large cypress swamp, through which the waters of the slough took their way. The prairie here is dotted with sloughs, the haunt of Sandhill Cranes, the Florida Black Duck, and of countless Herons and Ibises; and east of the swamp it stretches away to the horizon, where the sky line is broken only by an occasional pine island, and by an easterly strand of the Big Cypress, which from here can just be seen.

Here we hunted Cranes and Black Ducks, and I spent much time on the prairie watching the Burrowing Owls. Peter told me they were not nearly so numerous as formerly, when colonies of twenty and twenty-five together were not uncommon; and this was the only location he knew of in Lee County in which these interesting birds still bred.

They build their nests out in the sandy soil of the open prairie, on the higher places, from which the floods have receded, and which here had been burned over earlier in the season. We found numbers of their little mounds scattered about, but hardly thick enough to be called a colony.

On approaching an inhabited burrow, if one or both of the owners were not already in sight, they very quickly appeared; and standing bolt upright on their little mound of sand at the mouth of the burrow, would courtesy gravely to me, until on my nearer



Three Burrows of the Florida Burrowing Owl. Horizontal and vertical sections.

approach, they would fly off onto the prairie, perhaps fifty or a hundred feet, where they would continue their courtesies, uttering at the same time their calls, *Whit, whit-whit*, a long and two short notes: or *Whit-whit, who-who-who-who-whit*, two short notes followed by a stutter, a little lower in tone but ending with a short sharp *whit* at the end; or *Whit-whit, who-who-who-who-who*, two short *whits*, followed by the stutter. Often instead of flying they would run over the prairie, reminding me of the Robins one sees on the lawn, which after standing upright and still, suddenly bend forward and run.

I dug up a number of their burrows, but it was apparently too early to find eggs, though some of the nests appeared to be completed. These burrows, several of which I measured carefully, seemed to run in any direction, east, west, north or south, just as the birds happen to choose, for a distance of from four and a half to eight feet, with the floor of the burrow usually averaging from ten to twelve inches below the surface of the prairie, though we found one that ran as deep as eighteen inches.

The tunnels, which were usually from three to three and a half inches high and from four to five and half wide, ran down grade until about two feet from the entrance, and then nearly on a level, until just before the nest was reached, when there would be a slight rise in the grade, apparently to keep the nest a little above any water that might, in spite of the natural drainage of the soil, gather in the hole in time of storm. The nest chambers, which were oval, were about six inches high and from eight to nine inches in diameter, with a slight depression in the bottom; and those that were nearing completion were rather carefully lined with weeds and grasses, but in no case with cow dung (see article by S. N. Rhoads in 'The Auk' for January, 1892). In several of the burrows we found a small tunnel about two and a half by three inches in diameter, extending for distances varying from eight or ten inches to nearly four feet and ending abruptly. What these tunnels were built for, I am unable to explain, or how the bird managed to make them so small. Of one thing only am I certain, and that is that they were built before the nest was lined.

The little piles of sand at the mouth of the burrows necessarily varied in size according to the amount of excavation. The

largest that we saw measured forty by forty-four inches across, and was only three inches in height. Some of them were very conspicuous, while others were partly overgrown with grasses, and we found one that was in the side of one of those "bull holes" which here dot the prairie—holes pawed in the earth by bellicose bulls.

When the owls flew, they flew softly as all owls do, but rapidly when they so desired, and frequently with high undulations and succeeding dives. They never went a hundred yards from their nests, and we could not drive them away from the vicinity. As soon as we were through investigating their nests, the little birds at once flew back to them, and showed a distress to which I was only reconciled by the knowledge that they would doubtless soon begin to rehabilitate some old burrow, of which there were plenty in the vicinity. Once Tom and I discovered in the distance a burrow from which little jets of sand were issuing with great frequency and regularity, about three to the second, onto the mound in front. One of the birds was just inside the mouth of the burrow, apparently throwing the sand out backwards with his feet.

The owls never seemed to sleep, day or night, at least I never caught them at it, and once I went out on the prairie on a pitch dark night at 3 A.M., in an effort to see if one particular pair was at home, and blocked up the mouth of the burrow, only to find them a few yards away, apparently as well able to take care of themselves in the dark as in the daytime.

On the 18th we found a slough at one end of which was a little willow island, in which there were ten nests of Ward's Heron; seven of them contained well grown young, and three had well incubated eggs. Numbers of Boat-tailed Grackles were building here, some of their nests two or three feet above the water among the vines that hung pendant from the willows, while others were fifteen feet high on the out-reaching branches of the willows themselves. Most of the nests were in process of construction, though a few held an egg apiece, while one contained two eggs and another three. There was a flock of "Curlew" or White Ibises here, together with Louisiana and Little Blue Herons, and a number of Yellow-crowned Night Herons.

We were still in the turkey country and succeeded in picking up



1. FLORIDA BURROWING OWLS AT HOME.



2. NESTS OF WARD HERON.

another fine specimen of the much wanted hen; and gobblers could be heard every morning among the neighboring pine islands. We saw several hawks flying low and hunting over the prairie, that Tom declared were Everglade Kites, but which I never got near enough to shoot, and was unable to identify. I did, however, see several Marsh Hawks. There were also Killdeer and a few Snipe in some of the marshes, and we saw one bunch of about a dozen Greater Yellow-legs.

On March 20th when I had gone out early to see what the Burrowing Owls were up to, I took the following notes, which may be of interest as an account of the early morning bird life that immediately surrounded us.

"3 A.M. Awoke to find the moon about an hour high, and two Horned Owls hooting in the pine woods to the southwest. Do they always hoot as the moon rises, or is it that that is the only time I ever happen to hear them?"

"3.40 Black Ducks calling from slough to the eastward."

"4.20 As I was walking over the prairie the Sandhill Cranes began calling from all directions. Whether or not some of them were first aroused by me I am unable to say."

"4.35 A Chuck-will's-widow made a few calls."

"4.40 A Whip-poor-will after two or three preliminary throat clearers, started in with seventy-six calls, as against one hundred and eighty-eight I heard one make successively yesterday A.M."

"4.45 I can hear two Horned Owls, one Barred Owl, which has been hooting at intervals ever since I awoke, two Whip-poor-wills and one Chuck-will's-widow, all calling at once. The Horned Owls' notes sound thus: *Who, who-who-who, whoo whoo*; or *Who, who-who-who, who-who-who, whoo whoo*; a far deeper tone than those of the Barred Owl."

"4.50 Black Ducks again set up a squawking, Cranes are 'hollering' all over the prairies, and it is beginning to get light in the east. A Barred Owl is hooting close by, another in the middle distance, and a third far off."

"4.55 Night Herons quawking, Florida Yellow-throats singing in the nearby clumps of saw palmettos, and two Chuck-will's-widows and one Whip-poor-will are apparently trying to sing each other down."

"4.58 Boat-tails are beginning to call, and Jorees (Towhees) are everywhere in the palmettos about us."

"4.59 Black Ducks again squawking, Meadowlarks, Shrikes, Florida Yellow-throats everywhere, and Herons of some kind, either Louisiana or Little Blues calling from the swamp."

"5.03 A Turkey gobbling away off the southwest."

"5.04 Turkey gobbling frequently."

"5.05 More quawking of Herons, Barred Owls continue performance, but Horned Owls seem to have quit. The Okaloacoochee with its low lying fog looks like a huge lake."

"5.06 Jorees and Florida Yellow-throats are calling continuously in every direction. I thought I heard a Song Sparrow in the distance, though it may have been a Savannah."

"5.08 That gobbler is trying for a record."

"5.09 A Cardinal is singing nearby. He may well have sung before, and escaped notice."

"5.16 Quail are beginning to call, the gobbler is calling again, and apparently replying to another that has just started gobbling south of us."

"5.17 Crows are cawing; a little late it seems to me."

"5.19 Red-bellied Woodpeckers and Florida Grackles are beginning to arrive in our grove."

"5.20 A Flicker is calling in the distance, and a big gobbler is gobbling just a short piece up the trail."

"5.32 Pine Warblers, Red-winged Blackbirds and Downy Woodpeckers in the pines about us."

We succeeded in collecting four Florida Black Ducks while at this camp — three drakes and a duck. I forgot to measure the duck before skinning, but the three drakes when laid out on my operating table, each measured twenty-three inches in length, which is considerably longer than the measurements usually given for this species, and I was very much interested in finding that they all, both sexes, had bright coral red legs. The bills of the drakes were very highly colored, and looked to me like the bills of the freshly killed specimens of the northern species. Some, at least, of these birds were beginning to breed, for although we found no nests ourselves, I was later lucky enough to secure a beautiful set of eleven fresh eggs, taken by a friend of Tom's on March 20, in a slough near Immokalee.



A BONNET LAKE ON THE OKALOACOCHEE.³¹



NEST OF THE SAND HILL CRANE.